City of Santa Barbara
Parks and Recreation Department

Memorandum

DATE: May 18, 2011

TO: Creeks Restoration/Water Quality Improvement Program
Citizen Advisory Committee

FROM: Autumn Malanca, Water Resources Specialist

SUBJECT: **Storm Water Management Program Status Report**

COMMITTEE DIRECTION – FOR DISCUSSION

That the Committee receive a status report on the City's Storm Water Management Program.

DISCUSSION

The federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) Phase II regulations govern storm water discharges from municipalities that operate storm drain systems. The State Water Resources Control Board (Water Board) and its regional agencies are responsible for implementation of NPDES regulations. In response to these requirements, the City of Santa Barbara prepared a Storm Water Management Program (SWMP) designed to reduce the discharge of pollutants to protect water quality. The SWMP defines guidelines and requirements (best management practices or "BMPs") for the protection of water quality and the reduction of pollutant discharges. The Creeks Division has provided overall coordination and administration of the SWMP since development of the program began in 2003. SWMP implementation and compliance is a city-wide requirement.

In January 2009, the Water Board finally approved the City's SWMP after numerous revisions and informal implementation since 2003. This approval kicked off "Year 1" (of the 5 years covered by the SWMP permit) of formal City SWMP implementation, and annual reporting is now required. The City just completed Year 2 (2010) of SWMP implementation and reporting. Creeks staff administers quarterly reporting throughout the calendar year with all of the City departments and divisions that are responsible for implementing and reporting on specific storm water BMPs. The City's second Annual Report for SWMP implementation was compiled and submitted to the Water Board before the April 1st due date.

City of Santa Barbara SWMP Annual Report – Year 2

The City's SWMP contains six program elements that require BMP implementation and annual reporting. These program elements are referred to as "Minimum Control Measures" (MCM). They represent the following sections (implemented primarily by the City departments and divisions in parentheses) in the SWMP Annual Report:

1. Public Education and Outreach (Creeks)
2. Public Participation/Involvement (Creeks)
3. Illicit Discharge Detection and Elimination (Creeks, Water Resources, GIS, Building and Safety, Facilities, and Parks)
4. Construction Site Storm Water Runoff Control (Building and Safety)
5. Post Construction Storm Water Management (Community Development, Building and Safety, Public Works, Creeks)
6. Pollution Prevention/Good Housekeeping for Municipal Operations (Streets, Water Distribution, Wastewater, Parking, Facilities, Parks, Golf, Fire, Motor Pool, Creeks)

There are over 100 specific BMPs identified in the SWMP under the measures listed above. The annual reporting effort includes gathering reports confirming BMP implementation from 13 department and division managers and staff, as well as several Creeks Division staff. Summary reports and supporting documentation is submitted quarterly, including purchase orders, invoices, inspection reports, outreach ads, data spreadsheets, monitoring reports, and sign in sheets for required trainings.

The annual reporting requirements also include a Program Effectiveness Assessment, which is attached as the final section of the City's Annual Report. The California Storm Water Quality Association (CASQA) developed this approach which the Water Board subsequently adopted as a requirement for all SWMP Annual Reports. The purpose of the assessment is to confirm the desired results of municipal SWMP programs and identify modifications that may be needed, thus ensuring the iterative process is used as an effective management tool throughout the permit implementation. The Effectiveness Assessment rates each BMP with "outcome levels" to help categorize and describe the desired results of the program as well as identify needed modifications.

Creeks staff received a comment letter from the Regional Water Quality Control Board ("Water Board") on the City's Year 1 Annual Report in December 2010, and subsequently met with the Water Board staff in January 2011. We discussed our first year of reporting and how to address the Water Board's inquiries and improve our program and reporting for Year 2. Water Board comments also resulted in some minor SWMP modifications, which include some revised measurable goals as well as some new ones. Creeks staff produced a comment/response letter to address these issues, which documents how the City has and will continue to improve the Storm Water Management Program.

MCM 1: Public Education and Outreach

The BMPs in MCM 1 are designed to educate community members about steps they can take both at work and at home to prevent and reduce water pollution. All of the Public Education BMPs were successfully implemented and found to be effective in 2010, with a few modifications proposed to improve some measurable goals, per the Water Board's request. The number of presentations given to school children, total youth educated, and brochures distributed continue to exceed the SWMP's measurable goals. For example, 132 presentations for educating youth are required annually (SWMP BMP 1.1), with a goal of reaching 3,000 youth. City staff, in collaboration with Art From Scrap, the Multicultural Education for Resource Issues Threatening Oceans (MERITO) program, and local school programs exceeded this goal by providing 246 presentations, and thereby reaching over 5,700 students. Other Public Education and Outreach highlights include a new brochure about parking lot maintenance BMPs, which was created and distributed to a mailing list of 400 property owners in the City (with parking lots 5,000 square feet or greater, or 25 or more parking spots); and display ad requirements were met with more than double the amount of required ads, due to the work of the Creeks Division outreach coordinator.

MCM 2: Public Participation and Involvement

The Public Participation and Involvement MCM is intended to foster active community support for the SWMP, which in turn ensures that the program reflects community values and priorities and thus has the highest potential for success. All of the Public Participation and Involvement BMPs were successfully implemented and found to be effective in 2010. The Creeks Advisory Committee meetings are part of this MCM in order to keep the pubic informed about outreach efforts, creek restoration projects and water quality issues and efforts. Other BMPs include stakeholder meetings, regional coordination (intergovernmental meetings), the City's annual community forum on water quality issues, as well as community volunteer projects (such as creek clean-ups and storm water monitoring) all work together to establish a successful Public Participation and Involvement program. The community forum on water quality issues focused on canine scent tracking in 2010; a new/innovative water quality approach. Creeks Division staff invited Sable the Sewage Sniffing Dog to visit Santa Barbara and perform field tests in the Laguna Watershed and other areas around the City to detect and eliminate sources of human waste in the storm drain system. A highlight of the work was uncovering a direct leak from the sanitary sewer to the Hope St. storm drain, which was immediately repaired. Fortunately, this drain has been diverted to the sanitary sewer during dry weather for the past several years.

MCM 3: Illicit Discharge Detection and Elimination

The BMPs in the Illicit Discharge Detection and Elimination MCM work collectively to effectively reduce pollution in storm water by working to identify and eliminate sources of illicit discharges and illegal dumping. This part of the City's program depends on participation from the public and other City departments.

Creeks Division staff focuses on enforcing the water quality section of the City's Municipal Code (Chapter 16.15; Urban Pollution Controls, Non-Point Source Discharge Restrictions) to comply with this control measure. Over 200 enforcement calls were received and responded to during 2010 (approximately 30 more calls/enforcement responses than 2009). This section of the SWMP requires the City to produce a storm water ordinance (originally requiring a draft by Year 3), which will help to solve some internal regulatory conflicts, as well as consistency and effectiveness issues. However, due to the Water Board's "Joint Effort for Hydromodification Control Criteria," which will establish post-construction storm water requirements for Region 3 (Central Coast) as well as applicability thresholds/criteria, the City is holding off on drafting the storm water ordinance until this Joint Effort is completed (scheduled for completion in 2012). The existing Municipal Code and other related City ordinances, goals, and policies were reviewed in 2009/Year 1 (referred to as the City's Storm Water Ordinance Audit) to determine the need for an ordinance update and identify inconsistencies with the City's SWMP, Storm Water BMP Guidance Manual, and/or the NPDES Phase II regulations. Currently, should a responsible party employ practices that could result in a serious threat to water quality, or if a responsible party fails to abate a discharge that does or may result in a serious threat to water quality, there are tools available for enforcement including administrative fines. Our current ordinance provides legal authority to stop unauthorized contaminated discharges and to enforce storm water requirements.

MCM 4: Construction Site Storm Water Runoff Control

The Construction Site Storm Water Runoff Control MCM is implemented and enforced under authority of the City's Building Division, through City code, policy, and practice. 245 City Projects were reviewed for erosion/sediment BMPs in 2010. The City's Building Department attained 100% compliance by working with applicants to ensure that their erosion control plans (ECPs) were sufficient for the site and in compliance with the City's policy. Collectively, the BMPs in the City's SWMP related to construction site storm water runoff were found to be effective in the City's 2010 Annual Report, except for one BMP requirement which called for adopting an erosion/sediment control ordinance. The Building Department has proposed to delete that measurable goal from the SWMP, with the reasoning that compliance with sediment/erosion BMP selection and installation is ensured by not allowing the project to continue without the required criteria being met. Building staff feels this is a much better enforcement tool than an ordinance, which would not consider site specifics and challenges, and would likely result in simple fines which would be passed on to the project developer by the contractor and would not ensure continued compliance.

Other modifications were proposed for the Construction section to improve current construction site management; including providing inspectors with a complete list of sites that require an inspection prior to October 15th, or within the first week of work if construction begins after October 15th. This list will be used in conjunction with the existing method of pre-rain event inspections in an attempt to improve upon the Building Department's current tracking and inspection measures. The Building Department also implemented a new tracking/reporting approach (implemented early this year), which now identifies any/all project sites with new or additional square footage or any grading

proposed. (Previous reporting identified all projects with Building Department plan review, regardless of grading or new square footage data). This new reporting approach more appropriately focuses on projects with the potential to impact storm water and/or those that require erosion/sediment control BMPs.

MCM 5: Post-Construction Storm Water Management

Creeks Division staff also assists other city staff in incorporating Post-Construction Storm Water Management designs into proposed development and redevelopment projects. However, the Community Development Department is the main City department that focuses on post-construction storm water management. This MCM requires the design and implementation of specific infiltration and/or water capture BMPs into development and redevelopment within the City (bioswales, infiltration designs, rain barrels, etc.) for compliance with the SWMP's runoff volume, rate, and water quality treatment requirements. The City's post-construction storm water requirements are explained in detail in the City's Storm Water BMP Guidance Manual, produced and finalized in 2008.

Creeks staff remains directly involved in the development review process. A total of 82 projects implemented post-construction BMPs in Year 2. This is an increase of more than 50 projects from Year 1, thereby demonstrating that the City's understanding and implementation of post-construction storm water BMP requirements is successfully improving. In order to ensure this project SWMP compliance and better track project implementation, staff was directed at the end of Year 1 to display SWMP compliance (BMPs) on building permit plans and to include this activity in the City's "Tidemark" tracking system. This approach has proven to be a successful tracking mechanism.

MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations

The Municipal Operations Pollution Prevention portion of the Storm Water Management Program is intended to ensure that City operations and the delivery of public services occurs in a manner that protects storm water quality and serves as a good example for the community. The 2010 Annual Report demonstrates that collectively, the BMPs within the municipal operations component of the City's SWMP are effective in increasing awareness among City staff in order to change behavior and ultimately to reduce pollution. Creeks Division staff updated training materials for all 13 "operational division" staff trainings and created a Power Point presentation that began with asking staff questions they should already know about storm water management in order to assess where staff's weaknesses and/or needs for further training on storm water management lie. The presentation reviewed storm water management BMPs applicable to each City department and/or division. This approach was purposely different from Year 1, which used a training video.

Street sweeping is another pollution prevention/good housekeeping highlight, and a large City investment that demonstrates a measurable benefit in reducing pollutant loads. Over 19,000 curb miles were swept and over 2,250 tons of material was collected in Year 2. It is anticipated that these collected loads may increase in future

years due to the City's installation of debris screens on all catch basin inlets (to be completed this year). The screens serve as a barrier to trash and debris during dry weather that would normally fall into the catch basin and storm drain system. These screens require little/no maintenance, as opposed to the older approach of catch basin inserts, and they work hand-in-hand with the existing street sweeping program.

Next Steps

The City is now almost five months into Year 3 of formal SWMP implementation and reporting requirements. The coordination effort is large with 13 departments and divisions implementing and tracking over 100 required BMPs and measurable goals. Improvements in formatting and content that were made in the Year 2 Annual Report inspired Creeks Division staff to create individual templates for each responsible Department and/or Division manager who has reporting requirements, in order to streamline their quarterly reports. Through the past two years of reporting, staff has become more familiar with the SWMP's BMPs and reporting requirements and the City is on track to meet the SWMP's measurable goals for Year 3.

cc: Cameron Benson, Creeks Manager
Jill E. Zachary, Assistant Parks and Recreation Director